N-TOPCon

HANERSUN




# Hitouch 6N

## HN21RN-66HT

# 610-630W

**BIFACIAL**
High Efficiency Module

**23.3%**
Maximum Efficiency

### Long-Term Reliability

Module certified to withstand mechanical test load +5400Pa /-2400Pa.

Excellent anti-PID performance to guarantee a better sustainability in harsh environment.

### Higher Power Output

Higher module conversion efficiency benefit from bigger wafer and half-cell structure.

MBB technology enhances current collection with lower series resistance.

### Lower Hot Spot and Crack Risk

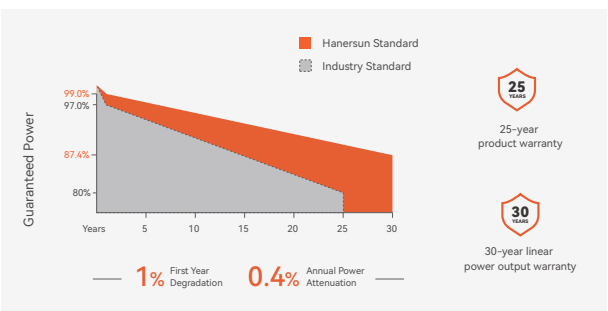
Reduce hot-spot risk with optimized electrical design and lower operating current.

Reduce crack risk by MBB solar cell design.

### Excellent Temperature Coefficient

Lower operating temperature and temperature coefficient increases the power output.

## Power Warranty




## Certificates

## Insurance

Munich RE

## About Hanersun

Hanersun is a world-leading clean energy company, with a business scope from the R&D and intelligent manufacturing of solar modules, energy storage products, to comprehensive energy solutions.

Made in China

## Electrical Characteristics (STC&BNPI) HN21RN-66HTXXXW(XXX=610-630)

| Testing Condition | STC | BNPI | STC | BNPI | STC | BNPI | STC | BNPI | STC | BNPI |
|---|---|---|---|---|---|---|---|---|---|---|
| Maximum Power (Pmax)* | 610 | 676 | 615 | 681 | 620 | 687 | 625 | 693 | 630 | 698 |
| Maximum Power Voltage (Vmp) | 40.59 | 40.59 | 40.77 | 40.77 | 40.95 | 40.95 | 41.13 | 41.13 | 41.31 | 41.31 |
| Maximum Power Current (Imp) | 15.03 | 16.66 | 15.09 | 16.71 | 15.15 | 16.78 | 15.20 | 16.85 | 15.26 | 16.90 |
| Open-circuit Voltage (Voc)* | 48.72 | 48.72 | 48.92 | 48.92 | 49.12 | 49.12 | 49.32 | 49.32 | 49.52 | 49.52 |
| Short-circuit Current (Isc)* | 15.94 | 17.66 | 16.00 | 17.73 | 16.06 | 17.79 | 16.12 | 17.86 | 16.18 | 17.93 |
| Module Efficiency(%) | 22.6% | | 22.8% | | 23.0% | | 23.1% | | 23.3% | |

STC: Irradiance 1000W/m², Cell Temperature 25℃, Air Mass AM1.5

BNPI: Irradiance: Front 1000W/m², Rear 135W/m², Cell Temperature 25℃, AM=1.5

*Measuring Tolerance: ±3%
Power Binning Tolerance: 0~+5W

## Electrical characteristics with different power bin (reference to 10% backside power gain)

| Module Type | 610W | 615W | 620W | 625W | 630W |
|---|---|---|---|---|---|
| Maximum Power (Pmax) | 671 | 677 | 682 | 688 | 693 |
| Maximum Power Voltage (Vmp) | 40.59 | 40.77 | 40.95 | 41.13 | 41.31 |
| Maximum Power Current (Imp) | 16.54 | 16.61 | 16.67 | 16.73 | 16.79 |
| Open-circuit Voltage (Voc) | 48.72 | 48.92 | 49.12 | 49.32 | 49.52 |
| Short-circuit Current (Isc) | 17.54 | 17.60 | 17.67 | 17.74 | 17.80 |

## Mechanical Parameters

| | | | |
|---|---|---|---|
| Solar Cells | N-TYPE Monocrystalline(210R) | No. of Cells | 132 [2 x (11 x 6) ] |
| Module Dimensions | 2382*1134*30/35mm | Weight | 32.5kg |
| Glass | 2mm-2mm | J-Box | IP68 |
| Frame | Anodized Aluminium Alloy | Output Cable | 4.0mm², 1200/1200mm |
| Connector | Zerun Co.,Ltd / Z4S-abcd<br>Stäubli Electrical connectors AG / PV-KST4-EVO2A/xy, PV-KBT4-EVO2A/xy | | |

## Operating Parameters

| | |
|---|---|
| Operational Temperature | -40℃~+70℃ |
| Maximum System Voltage | 1500V DC (IEC) |
| Maximum Series Fuse Rating | 35A |
| Bifacility | ϕPmax=80±5% ϕIsc=80±5% ϕVoc=98±2% |
| Fire Class Rating | Class C |

## Temperature Ratings

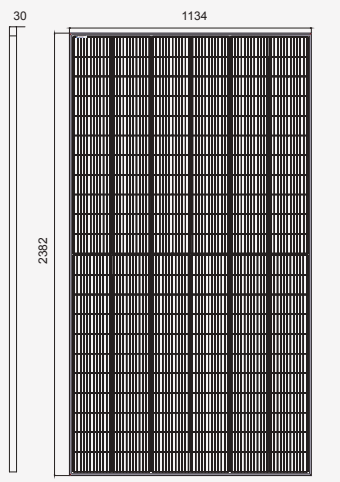
| | |
|---|---|
| Temperature Coefficient of Pmax | -0.28%/℃ |
| Temperature Coefficient of Voc | -0.23%/℃ |
| Temperature Coefficient of Isc | +0.045%/℃ |

(Do not connect Fuse in Combiner Box with two or more strings in parallel connection)

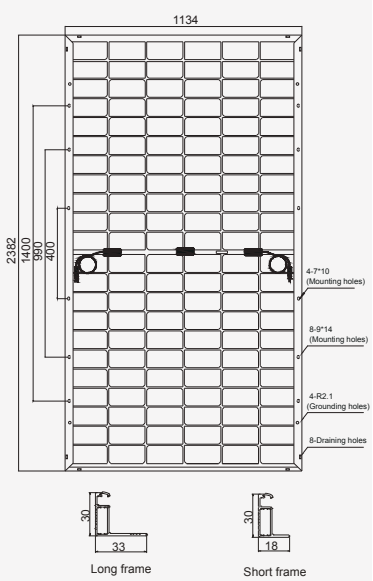
## Packaging

| | |
|---|---|
| Pcs per Pallet: 37 | Pcs per 40' HC: 740 |

## Dimensions (Unit: mm)

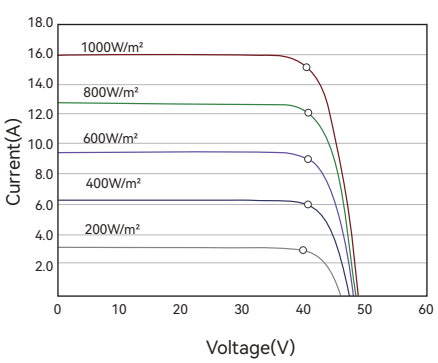



Front View

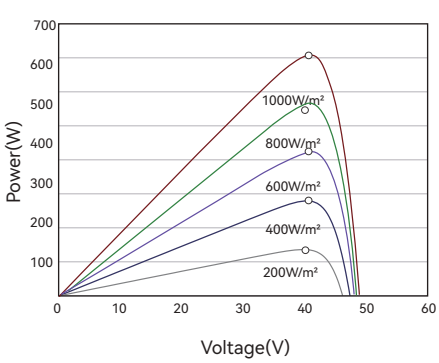



Back View

## I-V Curves of PV Module (620W)




## P-V Curves of PV Module (620W)




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